Ambler Road

Supplemental Environmental Impact Statement

Record of Decision

June 2024

Prepared by:
U.S. Department of the Interior
Bureau of Land Management

In Cooperation with:
Alatna Village Council
Allakaket Village Council
Evansville Tribal Council
Huslia Tribal Council
State of Alaska
Tanana Tribal Council
U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service

Participating Agency: National Park Service

Mission

To sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations.

Cover photograph: Middle Fork of the Koyukuk River in fall foliage.

Photograph courtesy of BLM staff

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Bureau of Land Management

June 2024



Record of Decision for the Ambler Road Project

LEAD FEDERAL AGENCY

Bureau of Land Management (BLM)

PROPONENT Alaska Industrial Development and

Export Authority (AIDEA)

APPLICATION REFERENCE NUMBER BLM Case File FF-09112

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ACRONYMS AND ABBREVIATIONS

AIDEA Alaska Industrial Development and Export Authority

ANCSA Alaska Native Claims Settlement Act

ANILCA Alaska National Interest Lands Conservation Act
Applicant Alaska Industrial Development and Export Authority

BLM Bureau of Land Management

Decision Record of Decision

Department U.S. Department of the Interior

District Ambler Mining District

District Court U.S. District Court for Alaska DOI U.S. Department of the Interior

EIS Environmental Impact Statement

EO Executive Order

EPA U.S. Environmental Protection Agency
FLPMA Federal Land Policy and Management Act

GAAR Gates of the Arctic National Park and Preserve

JROD Joint Record of Decision

NEPA National Environmental Policy Act NHPA National Historic Preservation Act

NOA Naturally Occurring Asbestos

Project Ambler Road Project

Proponent Alaska Industrial Development and Export Authority

ROD Record of Decision

ROW right-of-way

SF-299 Standard Form 299 Application for a Right-of Way

USACE U.S. Army Corps of Engineers USFWS U.S. Fish and Wildlife Service

1.0 INTRODUCTION

This document constitutes the U.S. Department of the Interior's (DOI or Department) Record of Decision (ROD or Decision) regarding an application for a Bureau of Land Management (BLM) right-of-way (ROW) grant for the Ambler Road Project (Project), submitted by the Alaska Industrial Development and Export Authority (AIDEA or Applicant) for construction and operation of a proposed 211-mile industrial access road in north-central Alaska from the Dalton Highway to the south bank of the Ambler River, at an area at times referred to as the Ambler Mining District (District).

This Decision is made in accordance with Section 302 and Title V (Sections 501-12) of the Federal Land Policy and Management Act (FLPMA) (43 USC 1732, 1761-72) and Sections 810, 1104, and 1106 of the Alaska National Interest Lands Conservation Act (ANILCA) (16 USC 3120, 3164, 3166).

This ROD memorializes DOI's decision to select the No Action Alternative that was presented in the April 2024 Ambler Road Final Supplemental Environmental Impact Statement (EIS) and to terminate the BLM ROW grant issued to AIDEA for the construction and operation of the portions of a proposed 211-mile road in north-central Alaska that would cross BLM-managed public lands. The scope of this Decision is limited to the components of the Project proposed to occur on BLM-managed public lands.

1.1 Background

On November 24, 2015, and supplemented on June 20, 2016, AIDEA filed a consolidated application (known as Standard Form 299 [SF-299]) to construct and operate a proposed 211-mile industrial access road that would provide access to the currently road-inaccessible District. Pursuant to ANILCA Section 1104, AIDEA simultaneously filed the SF-299 application with the BLM and other federal agencies thought to have regulatory jurisdiction over the proposed Project, including the National Park Service (NPS), U.S. Army Corps of Engineers (USACE), and U.S. Coast Guard. With respect to the BLM, the SF-299 sought a FLPMA Title V ROW grant from the BLM for use of BLM-managed lands along the proposed route of the access road. On April 29, 2019, AIDEA submitted to the BLM an amendment to the SF-299, which addressed communications facilities associated with the proposed access road.

In February 2017, the BLM and several cooperating agencies initiated the development of an EIS to analyze the environmental impacts of AIDEA's proposed Project and reasonable alternatives. In August 2019, the BLM published a Draft EIS for public comment. The Ambler Road Final EIS was published in March 2020 (the 2020 EIS). The BLM, DOI, and USACE signed a Joint ROD in July 2020 (the 2020 JROD). The 2020 JROD approved Alternative A presented in the 2020 EIS, the Applicant's proposed 211-mile Project, including the issuance of a BLM ROW grant under FLPMA for access across BLM-managed lands. On January 5, 2021, the BLM issued AIDEA a ROW grant (No. F-97112; the ROW Grant). On March 11, 2022, then—Deputy Secretary of the Interior, Tommy Beaudreau, issued a decision suspending the ROW Grant (the Suspension Decision) due to legal defects in the underlying record supporting issuance of the ROW Grant. The Suspension Decision stated that the ROW Grant would remain suspended while the Department conducted further analysis and consultation. The Suspension Decision further stated that after completing the additional analysis and consultation, the appropriate Department official would issue a new decision on the suspension and AIDEA's application for a ROW across BLM-managed lands that would determine whether the ROW Grant should be affirmed, affirmed with amended terms and conditions, or terminated.

In August and October 2020, litigation commenced challenging the 2020 EIS and 2020 JROD. In May 2022, the U.S. District Court for Alaska (District Court) granted the Department's request for remand of the JROD so that the BLM could address deficiencies in the analysis of subsistence impacts under ANILCA Section 810 and Tribal consultation pursuant to Section 106 of the National Historic

Preservation Act (NHPA) and so that the BLM could supplement the 2020 EIS to properly assess impacts to resources identified as areas of concern.

On remand, the BLM prepared a Draft Supplemental EIS and issued it for public comment on October 13, 2023. The BLM developed the Final Supplemental EIS in consideration of the public comments it received on the Draft. The Final Supplemental EIS includes, as Appendix M thereto, a revised evaluation of impacts to subsistence uses and needs conducted pursuant to Section 810 of ANILCA. The Notice of Availability for the Final Supplemental EIS was published in the Federal Register on April 26, 2024.

The Supplemental EIS was prepared by the BLM as the lead agency, with the assistance of the following cooperating agencies: Alatna Village Council, Allakaket Village Council, Evansville Tribal Council, Huslia Tribal Council, State of Alaska, Tanana Tribal Council, USACE, U.S. Environmental Protection Agency (EPA), and U.S. Fish and Wildlife Service (USFWS). Additionally, while not a cooperating agency, the NPS participated in the preparation of the Supplemental EIS. This process resulted in a Final Supplemental EIS that provided a more detailed analysis of the environmental impacts of the Applicant's proposal and alternatives thereto to inform and support the reviews and decisions of the Department and the BLM, with input from cooperating agencies, for the Project.

1.2 Authorities

Title V of FLPMA (43 USC 1761–72) authorizes the BLM to issue ROWs for roads across BLM-managed lands. In considering whether to grant such a ROW, the BLM must comply with other applicable laws, including Section 302 of FLPMA (43 USC 1732) and Sections 810, 1104, and 1106 of ANILCA (16 USC 3120, 3164, 3166).

2.0 DECISION

For the reasons discussed in Section 4.5 of this ROD, this Decision: (1) selects the No Action Alternative as it was presented in the April 2024 Ambler Road Final Supplemental EIS, and thus denies AIDEA's application for a ROW grant across BLM-managed lands; and (2) terminates the BLM ROW Grant issued to AIDEA on January 5, 2021. The termination of the ROW Grant is retroactively effective January 5, 2021, the date of the ROW Grant's issuance, such that AIDEA is entitled to a refund of any rentals it has paid under the ROW Grant.

Since there is no longer a federal undertaking, the BLM is directed to take the appropriate steps to terminate the NHPA Section 106 Programmatic Agreement.

3.0 PROJECT DESCRIPTION

AIDEA proposes a 211-mile, all-season industrial access road. The proposal includes 11 major bridges (greater than 140 ft), 16 medium bridges (50 to 140 feet), and 22 small bridges (less than 50 ft), as well as over 2900 culverts; an estimated need for 41 material sites; four maintenance stations; three airstrips; and related infrastructure and utilities, such as employee housing and communication towers (see Chapter 2, Alternatives, of the Final Supplemental EIS). AIDEA proposes building this road in phases, starting with a seasonal, single-lane, gravel pioneer road (Phase 1). The road would be expanded in Phase 2 to a wider all-season, single-lane gravel road and later further expanded to a two-lane gravel road in Phase 3. AIDEA projects the road to have a life of approximately 50 years, based on an estimate of when mineral exploration and development in the District is anticipated to be completed. AIDEA's proposal calls for removal of the road and reclamation and restoration of the ROW upon cessation of mining activities in the District, although no detailed reclamation plan has been developed. Although AIDEA intends for the access road to facilitate further mining exploration and development, AIDEA has not directly proposed

mining activities in the District. Others would pursue the mining activities, which would require separate permitting decisions by applicable regulatory agencies.

As proposed by AIDEA, the Project would be located in north-central Alaska, through an area that currently has little to no development. The proposed route of the road would start at the Dalton Highway north of Fairbanks and run west 211 miles over mostly continuous and discontinuous permafrost along the southern foothills of the Brooks Range mountains to the District, passing through lands managed by the BLM, NPS (Gates of the Arctic National Preserve), State of Alaska, and Alaska Native Claims Settlement Act (ANCSA) corporations (see Volume 4, Map 2-3, pp. 1, 2, and 3, of the Final Supplemental EIS). The proposed road corridor traverses the south side of the Brooks Range, following a series of stream and river valleys oriented roughly east-west, separating the Schwatka Mountains from a series of smaller mountain ranges and foothills, including the Ninemile Hills, Jack White Range, Alatna Hills, Helpmejack Hills, Akoliakruich Hills, Angayucham Mountains, and Cosmos Hills. AIDEA's proposed route crosses 11 major rivers: the Koyukuk, Wild, John, Malamute Fork, Alatna, Kobuk, Reed, Manueluk, Kogoluktuk, and Shungnak rivers; and Beaver Creek, all of which would require major bridge crossings. Additionally, hundreds of named and unnamed smaller rivers and streams intersect the proposed route, requiring additional small and medium bridges and culverts. These rivers and streams provide important feeding, rearing, spawning, and overwintering habitat to more than 20 fish species, including important subsistence species such as pacific salmon, sheefish, broad and humpback whitefish, Arctic grayling, northern pike, and burbot. The proposed road corridor is also within the winter, migratory, and peripheral range of the Western Arctic Caribou Herd. This herd has recently experienced significant decline due to climate change and other factors, yet remains a key subsistence resource for over 40 communities in northwestern and northern Alaska. The proposed road corridor also traverses areas used by local residents for berry picking and vegetation gathering; waterfowl and moose hunting; and overland and over-water transportation. Many local residents have communicated the importance of the area in maintaining their mental, spiritual, and cultural well-being.

4.0 ALTERNATIVES

Considering and comparing alternatives, including the alternative of no action, helps to ensure that ultimate decisions concerning projects are well founded and consistent with national policy goals and objectives and provides a clear basis for choice among options considered by the decisionmaker (40 CFR 1502.14¹). The National Environmental Policy Act (NEPA) requires that an EIS include discussion of a range of reasonable alternatives, including the No Action Alternative, and the potential effects of those alternatives. The term reasonable as defined in NEPA regulations is based on consideration of a project's purpose as well as technology, economics, and common sense.

To identify the alternatives evaluated in detail in the Supplemental EIS, the BLM reconsidered the range of alternatives analyzed in the 2020 EIS (see Chapter 2, Alternatives, of the Final Supplemental EIS). These include a No Action Alternative, AIDEA's proposed alternative (Alternative A), and two additional action alternatives (Alternatives B and C). Other routes were investigated by the Alaska Department of Transportation and Public Facilities and were considered, but the BLM ultimately eliminated those alternatives from detailed analysis as outlined in the Supplemental EIS. The BLM also considered comments received during scoping for the Supplemental EIS, including multiple comments related to alternatives and factors that fed into the alternative screening process. The BLM worked with cooperating agencies to determine whether any new information since publication of the 2020 EIS warranted

¹ The Council on Environmental Quality (CEQ) amended its National Environmental Policy Act (NEPA) regulations in 2020 and again in 2022 (85 Federal Register 43,304 [July 16, 2020]; 87 Federal Register 23,453 [April 20, 2022]). Because the BLM began this NEPA process before those amendments' effective dates, the BLM is applying the prior regulations. The Supplemental EIS and this ROD solely cite the CEQ regulations as codified at 40 CFR 1500-08 (2019).

revisiting any of the alternatives previously eliminated from consideration or revising the existing action alternatives, or whether any new proposed alternatives should be evaluated in detail.

4.1 Alternatives Considered and Carried Forward for Detailed Analysis in the Supplemental EIS

In developing alternatives for the Supplemental EIS, the BLM first reviewed public comments that were submitted on the 2019 Draft EIS for any alternatives concepts that were previously excluded from detailed consideration but might now be relevant based on new information that could reduce overall potential impacts, especially impacts to subsistence use and resources, including habitat. Alternatives options considered during the cooperating agencies' alternatives development workshop included the reasonableness of a road or railroad route to the west, terminating at a port site in Nome; alternative modes of transportation that could be used to support exploration, including aircraft or ice roads; combining the proposed phases of construction; an alternative that consists of a road and a double pipeline (for fuel and flotation concentrate slurries) corridor adjacent to the road; and an alternative that was proposed during scoping for the Supplemental EIS by Tanana Chiefs Conference (TCC), which was referred to as the Tribal Alternative.

The BLM held a 45-day public scoping comment period to solicit public input on the Ambler Road Supplemental EIS. Commenters suggested that the BLM expand the list of alternatives to include a transportation corridor that travels west to the Bering Sea, not east to the Dalton Highway; a railroad corridor that may or may not be spurred from the existing Red Dog Mine; aircraft access to mine sites; a no road alternative; and an alternative that includes increased environmental mitigation measures.

Potential new alternatives concepts were evaluated against the existing screening criteria (see Appendix G, Alternatives Development Memorandum, of the Final Supplemental EIS), which consist of a 2-step screening process: (1) an initial screening of transportation modes, including road, standard rail, blimp/dirigible, pipeline, elevated rail, narrow-gauge rail, ice road, and barge; and (2) a screening of routes associated with the reasonable transportation modes (see Appendix G, Attachment C for a summary). The BLM considered an alternative's effectiveness at satisfying the purpose and need, its technical and economic feasibility, the practicality of the alternative, and whether the alternative substantially duplicated other alternatives already being analyzed in detail. Final Supplemental EIS Sections 2.3, Alternatives Considered but Eliminated from Detailed Analysis, and 2.4, Alternatives Retained for Detailed Analysis, describe these alternatives further.

The BLM and the cooperating agencies retained the following three action alternatives (Alternatives A, B, and C), the No Action Alternative, and a new combined phasing option as the reasonable range of alternatives analyzed in detail in the Supplemental EIS:

- Alternative A: AIDEA Proposed Route (Gates of the Arctic National Park and Preserve North [GAAR North]) to the Dalton Highway. This alternative is the Applicant's proposed route, described in Section 3.0 above. Screening data indicated this alternative would be constructible and less expensive than other alternatives. This alternative would have a logical end point connecting into the road and rail network to provide year-round access to existing port facilities located to the south.
- Alternative B: AIDEA Proposed Alternative Route (Gates of the Arctic National Park and Preserve South [GAAR South]) to the Dalton Highway. This alternative shares much of its alignment with Alternative A, and screening data indicated it is substantially similar to that route. Despite the similarities, the BLM retained it because it provides a distinct route across GAAR and is consistent with the alternatives the NPS evaluated in its Environmental and Economic Analysis. Furthermore, although this alternative is identical to Alternative A in those areas where

it crosses BLM-managed lands, it merited treatment as a separate alternative in the EIS because the USACE is a cooperating agency, and the route is not identical across areas falling under USACE's jurisdiction.

- Alternative C: Diagonal Route to the Dalton Highway. The BLM developed this alternative based on comments received in 2018 during scoping for the original EIS. The 332-mile route would entail more new construction than the other alternatives but has a similar driving length from the District to Fairbanks. This alternative would have a logical end point connecting into the road and rail network to provide year-round access to existing port facilities. Public comments during scoping for the 2020 EIS showed some public support for this alignment and the potential to benefit communities along its route. The BLM carried this alternative forward for detailed analysis after considering all screening criteria, including whether the alternative addressed the BLM's purpose and need in preparing the Supplemental EIS and environmental factors. No comments in support of Alternative C were received during the scoping period for the Supplemental EIS.
- Combining Phasing Option for All Action Alternatives. The BLM developed this option for the Supplemental EIS based on public comments, new information, and cooperating agency input. This option would eliminate Phase 1 and would initially build the entire road to Phase 2 standards, as described in Final Supplemental EIS Section 2.4.3, Features Common to All Action Alternatives, Construction Phasing. It would still include Phase 3 of the road as described in Section 2.4.3. This option was developed to address impacts on permafrost, water quality, and fish and to reduce noise and disturbance impacts from staging and operating construction equipment for two separate phases. It is estimated that construction of the route to Phase 2 requirements would require a single mobilization of construction equipment and construction time of approximately 2 to 3 years (compared to 3 to 4 years for separate construction of Phase 1 and Phase 2 roads). Further details about construction are provided in Final Supplemental EIS Appendix G, Section 6.4.2.
- No Action Alternative. Under the No Action Alternative (which was identified as the BLM's Preferred Alternative and the environmentally preferred alternative in the Final Supplemental EIS), the BLM would not grant land use authorizations, and no road to the District would be constructed or operated on BLM-managed land. The BLM identified the No Action Alternative as its preferred alternative in the Final Supplemental EIS because it determined that any of the action alternatives would significantly impact resources, as discussed in Chapter 3 and appendices of the Final Supplemental EIS, including important subsistence resources and uses, in ways that cannot be adequately mitigated.

Table 1, below, provides a summary of key project components by alternative. See also Chapter 2.0 and Appendix G of the Final Supplemental EIS for a detailed description and comparison of the alternatives considered and carried forward for detailed analysis in the Final Supplemental EIS.

Table 1. Summary of major project components for each action alternative*

Component	Alternative A	Alternative B	Alternative C
Terminus (project start)	MP 161 Dalton Highway	MP 161 Dalton Highway	MP 59.5 Dalton Highway
Terminus (project end)	Ambler River/Ambler Mining District	Ambler River/Ambler Mining District	Ambler River/Ambler Mining District
Length of industrial access road (miles)	211	228	332
Total footprint of industrial access road (acres)	2,318	2,551	5,262

Component	Alternative A	Alternative B	Alternative C
Total footprint of support access roads (acres)	137	214	239
Number of maintenance stations (12 acres each)	4 stations (48 acres)	4 stations (48 acres)	5 stations (60 acres)
Number of material sites	41	46	44
Total footprint of material sites (acres)	1,863	2,155	2,408
Number of airstrips (150 feet by 3,000 feet)	3	3	5
Total footprint of airstrips (acres)	153	153	255
Number of vehicle turnouts (1 every 10 to 11 miles)	20	22	32
Number of communications towers: At maintenance stations + At materials sites = Total number	3 + 9 = 12	3 + 10 = 13	5 + 14 = 19
Total footprint of Project (acres)	4,524	5,138	8,210
Total footprint of Project on NPS-managed lands (acres)	332	343	0
Gravel needed for construction (cubic yards)	15 million	16.8 million	22 million
Gravel needed for maintenance (cubic yards, annually)	220,000	238,000	347,000
Number of minor culverts (to 3 feet wide) ¹	2,864	3,150	4,076
Number of moderate culverts (4 to 10 feet wide) ¹	7	5	131
Number of major culverts (10 to 20 feet wide) ¹	12	9	141
Number of small bridges (less than 50 feet long) ¹	22	18	79
Number of medium bridges (50 to 140 feet long) ¹	16	12	158
Number of large bridges (greater than 140 feet long) ¹	11	11	14

Source: DOWL 2016; US Army Corps of Engineers (USACE) 2020; Analysis by the Bureau of Land Management (BLM)

4.2 Primary Impacts from Action Alternatives

The analysis presented in the Final Supplemental EIS (Chapter 3, Affected Environment and Environmental Consequences) documents the affected environment and the anticipated impacts of Alternatives A, B, and C, and compares those impacts to the No Action Alternative. Appendix C of the Final Supplemental EIS (see Section 1.5 and Table 2) summarizes the impacts for each alternative and presents the likelihood of occurrence, magnitude, duration, and geographic extent of the impacts described in Chapter 3. This section of the ROD describes the primary impacts from the action alternatives, focusing on resources of particular concern as identified by the BLM interdisciplinary team, and by the public, Tribes, and cooperating agencies through the BLM's public involvement process.

Alternative A, AIDEA's proposed route, runs 211 miles from the Dalton Highway to its terminus at the District. Alternative B, AIDEA's proposed alternate route, is 228 miles long. In general, Alternatives A and B share an alignment across the project area except with regard to the portion of the route through and near GAAR. Alternative A crosses 26 miles of GAAR. Alternative B crosses 18 miles of GAAR but has a longer overall route. Alternative C follows an almost entirely separate alignment, crossing different terrain and running approximately 50 percent longer than the other alternatives with a total route length of 332 miles. Under Alternative C the longer road construction length means a correspondingly greater acreage of impacts to vegetation, wetlands, and wildlife habitat; greater impacts to streams; and greater uses of various tracts of (almost exclusively) public or Native corporation lands.

As compared to Alternative C, Alternatives A and B would have greater impacts related to sheefish habitat, the Western Arctic Caribou Herd, and use of material containing naturally occurring asbestos

(NOA). As compared to Alternatives A and B, Alternative C would have greater impacts on the Ray Mountains Herd (RMH) of caribou and on moose, as well as greater involvement with discontinuous permafrost.

While the action alternatives may have somewhat different impacts when compared to each other, they all have substantial impacts on the region. As multiple commenters have noted, whether park land, multiple-use federal or state land, or Native corporation land, the area as a whole is minimally developed and has value as a large, intact portion of arctic/subarctic wildlife habitat, a subsistence-use area, and a tourist attraction. This value would be considerably reduced if divided by the presence of a road under any of the three action alternatives. In general, any road would be the first road into this area, regardless of alternative, and many impacts would have a larger incremental effect than similar impacts in an area that already had roads. Besides direct fill in wetland and upland vegetation habitats due to road construction, vegetation and animals near the road would be affected by road dust, noise, movement of vehicles, light or shading (at culverts and bridges), and potential spills of pollutants from truck traffic.

All alignments cross areas of NOA and rock that can generate air quality impacts or acidic runoff when disturbed, which can be harmful to the environment and human health. Gravel materials containing NOA could be used in the construction of the road embankment where alternative materials are not readily available. AIDEA has committed to following State of Alaska requirements for use of gravels containing NOA in construction projects. All action alternatives would result in impacts to vegetation; wetlands; and fish, bird, and mammal habitats.

All action alternatives would result in air emissions due to combustion for movement of vehicles, heating maintenance camps and buildings, and generating power at maintenance camps and for communications facilities. While no alternative would be expected to directly generate emissions of air pollutants, including dust, at levels that would approach or exceed National Ambient Air Quality Standards, greenhouse gas (GHG) emissions would result from vehicle use and equipment combustion during construction, and from road use once construction was complete. The annual cumulative GHG emissions from ore transportation would range from 51,972 metric tons/year of carbon dioxide equivalent (CO₂e) under Alternative C to 54,230 metric tons/year CO₂e under Alternative A to 55,835 metric tons/year CO₂e under Alternative B.

All alternatives pass through areas with wetlands, and constructing a road would eliminate both upland and wetland vegetation. In general, the longer the alignment, the bigger the footprint and consequently the greater the loss of or effect on vegetation and wetlands and their functions, including habitat for wildlife, flood attenuation, and permafrost insulation. The effects of Alternative C would typically be 50 percent or more greater than those of Alternative A.

The construction of the gravel road and its associated infrastructure would compact underlying soil, potentially impact thaw depths, and reduce natural infiltration into areas below the gravel footprint, all of which could alter the shallow groundwater movement in the active layer. Groundwater flow beneath roadway embankments may increase the thaw of permafrost. The gravel roadway embankment is proposed to be 3 to 8 feet thick, which provides additional insulation to underlying soils with the potential to reduce the active layer thickness. The gravel material, however, absorbs more solar radiation than the natural vegetation and could lead to increased permafrost thaw, especially on the south face of east-west roadway alignments. Thawing of permafrost may expose previously frozen materials to subsurface flows, which may react with constituents of minerals in the soil that had once been sequestered in ice (Barker et al. 2014; Jones 2016). This may mobilize minerals and metals and introduce chemical changes in the soils, groundwater, and surface waters. Permafrost thaw will alter water flow, both surface and shallow groundwater, in ways not predictable or fully understood. As a result, permafrost thaw has potential to negatively impact downstream water quality through mobilization of thawed soil constituents, fugitive

dust (e.g., sediment, metals, asbestos), hazardous materials from spills, mining concentrate, and byproducts.

Under all action alternatives, water quality would be negatively affected and water flows would be altered along the corridor compared to current, mostly natural conditions. Ice road, bridge, and culvert construction; gravel extraction; gravel placement; water withdrawal; and wastewater discharge would affect water bodies. Thousands of culverts would channel flowing water under the road and would affect natural flow patterns, erosion patterns, natural channel migration, ponding, and flooding patterns. Dispersed overland flow would be concentrated into distinct flow channels leading to the culverts. Changes in water depth and velocity could result in changes in erosion or sedimentation, ponding, or channel migration.

The road would impact fish habitat and alter free fish passage based on likely changes to channels, flows, sedimentation, and impacts caused by culverts, bridge piers, alteration of surface and subsurface flow patterns, and other effects. Nonpoint-source pollutants in runoff and from dust as well as spills or leaks of toxic material could affect fish health and damage spawning and rearing habitat. There are few known sheefish spawning areas in Alaska, and two are in the project area. Alternatives A and B would cross multiple streams upstream of these spawning areas, with Alternative B closest at 7 miles upstream. Alternative C would cross downstream of these spawning areas. Impacts from changes from direct loss of fish and aquatic habitat - such as the road or materials sites resulting in fill or excavation in wetlands used as fish rearing habitat, along with effects of road dust and general road runoff on adjacent water quality would be high likelihood, large magnitude, long-duration impacts of a small/narrow extent.. Changes from the construction of culverts and bridges that would channel sheet flow, impound water, change water velocities and erosion/sedimentation patterns, and possibly change the local relationship of ground water and surface water would affect fish movement and degrade the quality of habitat. The primary effects to fish and aquatic organisms would result from degrading habitat quality at and downstream of conveyance structures and gravel mine sources near rivers, potentially impeding seasonal habitat connectivity, modifying hydrologic conditions along the entire length of the road embankment, changing water quality or quantity available in source lakes or rivers due to ice road development and maintenance, and introducing the potential for accidental spills of petroleum products, mineral concentrates, and other contaminants into aquatic habitats. Of particular concern is the potential for the road to accelerate the predicted rate of climate-driven permafrost degradation, which would further degrade downstream water quality, potentially inhibit fish movement, and may alter species distribution and abundance and influence fish populations.

The proposed road would also fragment wildlife habitat. Public and agency commenters have expressed the greatest concern regarding potential fragmentation of habitat for the Western Arctic Caribou Herd, which, during roughly 1985-2015, migrated across the project area south and west from the western North Slope to the upper Kobuk and Selawik drainages, Nulato Hills, and Seward Peninsula. Since about 2016, much of this herd has wintered on the North Slope, in the west-central Brooks Range west of the Dalton Highway, and in the upper Koyukuk and Kobuk drainages within and near the project area. Caribou migration patterns and movements of other wildlife would be affected by the presence of a road and road noise. With regards to Western Arctic Caribou Herd habitat directly impacted, Alternative C would impact 4,120 acres, Alternative A would impact 4,161 acres, and Alternative B would impact 4,775 acres. However, this only reflects the acreage covered by gravel or infrastructure; it does not reflect the much larger areas of seasonal ranges where caribou distribution or movements would be impacted by the road and associated traffic, infrastructure, and human activities. For all action alternatives, approximately half of the habitat loss would be from peripheral habitat. The presence of a road and road noise would affect caribou migration patterns and movements of other animals. Changes in migration could alter where caribou spend their winters and summers; affect energy expenditure of the animals; and, with other herd pressure from other developments and climate change, could affect calving and survival rates, as well as

herd availability to subsistence communities. These impacts could cause further declines in the population of the Western Arctic Caribou Herd, which after peaking in 2017 at 259,000 caribou has steadily declined with each subsequent population survey taken and most recently (2023) was estimated at only 152,000 caribou. The herd's steady population decline indicates that the herd is stressed and therefore more susceptible to additional adverse impacts.

The impacts from the road project on birds would include loss and alteration of terrestrial and aquatic habitat, disturbance and displacement of birds, and injury or mortality. Vegetation removal and gravel fill replacement would result in loss of breeding, nesting, foraging, staging, and stopover habitat for birds and could disproportionally impact rare, habitat-limited, and specialist bird species, as well as those relying on uncommon habitats removed or altered by project activities. Indirect alteration and degradation of bird habitats would occur as a result of gravel spray, fugitive dust and dust abatement chemicals, snow accumulation and drifting, thermokarsting, alteration of water drainage and snowmelt patterns, and the spread of invasive and exotic plant and animal species. Birds may be injured or killed as a result of collisions with vehicles, communication towers, power lines, bridges, and lighted structures; furthermore, attraction of avian predator species to anthropogenic food sources and human structures could also result in additional bird mortality, particularly for ground-nesting species. Noise and light pollution may also impact birds at farther distances than the project footprint, causing higher stress levels and inhibited predator detection and altering singing, nesting, and migration patterns. The types of potential effects would be similar for each alternative and would vary based on the available habitat types under each action alternative.

Social impacts, including to subsistence and communities, would be of the same type for all action alternatives. Local residents are concerned that the road would introduce more human activity into the regions that would detract from the rural lifestyle and forever change the culture and traditional practices of the Alaska Native communities. There is also concern that competition for subsistence resources would increase and subsistence resource availability would be reduced, thereby increasing food insecurity or resulting in local residents relying on less healthy options. Increased interaction between community members and industrial road traffic could result in serious accidents and injuries. Access to communities may also increase the potential for escalations in crime, including the importation of drugs, alcohol, and other prohibited substances into the communities; and the potential for increased sexual violence against women. Different communities would be affected depending on the alternative selected. Kobuk, Shungnak, and Ambler would be affected by all alternatives, with direct road connection to Kobuk, Direct road connections would likely result in major harms suffered by the community through the influx of new workers and new environmentally damaging activities to the region. It is possible that road connections could result in less expensive delivery of fuel, groceries, and construction materials. Alternatives A and B would be more likely to affect Bettles and Evansville, while Alternative C would affect Hughes (with a future road or year-round trail connection anticipated to develop from Hughes to the proposed Ambler Road). Alatna and Allakaket lie between the Alternatives A and B and Alternative C alignments and likely would be affected by any action alternative, but to lesser degrees than closer communities.

While the local communities would bear most of the impacts described above, direct employment benefits that occur during road construction and operation would not be expected to disproportionately accrue to low-income and minority populations, because local communities are not expected to receive project-related employment benefits in greater proportion or degree than other populations in the region or the general state population. It is expected that workers employed by Alaska-based firms during road construction would come from all regions of the state. In addition, communities may be impacted by the costs and benefits of new mining jobs, although such impacts would be limited in both duration and impact. Because of its longer length and higher cost, Alternative C would generate more construction and operations and maintenance jobs over the limited time that such activities are needed. Economic benefits, even if realized, may not outweigh potential impacts from the road and mining development.

Recreation and tourism are closely related to wilderness values in the area. Opportunities for solitude along the corridor would be affected whether people are backpacking, rafting, fishing or hunting by floatplane or motorboat, or going to traditional fish camps from nearby communities. The construction and operation of the road would change the remote character and reputation of this region. The area sees limited use by people from outside the study area compared to road-accessible lands, but of the recreation/tourism trips that occur, many begin in GAAR and involve floating out of the Brooks Range to downstream communities or places where aircraft can get in to fly people out. Visitors would pass under Alternatives A and B bridges midway through their multiday trips, often trips that started on a designated wild and scenic river (designations end where the rivers flow out of GAAR). Visual and noise impacts would affect the experience.

Two existing fly-in lodges that market their remote locations would be near the Alternatives A and B alignments, and the visitor experience could be altered. However, the lodges and communities may have potential for commercial delivery of materials and supplies by road, likely for transfer by snowmobile or boat to their end destination. Such impacts would endure for the temporal duration of the ROW for the proposed action, and while some impacts may be mitigated or even reversed in certain areas following the closure and reclamation of the road, many impacts will be effectively permanent.

As discussed in greater detail in Section 4.3 below, subsistence uses would be significantly affected by the presence of a road, due to the displacement of resources from traditional harvest areas and potential population level impacts to key resources. The subsistence study area for the Supplemental EIS includes 66 communities that harvest subsistence resources within or near the project area, use the project area to access subsistence use areas, or harvest resources that migrate through the project area and are later harvested elsewhere. The 66 subsistence study communities fall under three categories: primary subsistence study communities (27 communities), caribou (Western Arctic Herd) study communities (42 communities), and fish study communities (32 communities). There are 16 communities with subsistence use areas that overlap the alternatives.

Subsistence uses would be altered by the presence of a road, both because a road would affect wildlife behavior and because it would bisect travel routes used by hunters and affect their access to subsistence use areas. Seven subsistence communities would have five or more of their subsistence use areas impacted by the road under Alternatives A and C; eight communities would be affected at this level under Alternative B. Besides Kobuk, Shungnak, and Ambler, which would be similarly affected under all action alternatives, Alternative A would affect five or more resource uses for Bettles, Coldfoot, Evansville, and Wiseman; Alternative B would affect five or more resource uses for Alatna, Bettles, Coldfoot, Evansville, and Wiseman; and Alternative C would affect five or more resource uses for Alatna, Allakaket, Hughes, and Stevens Village.

Under all alternatives, other communities would also be affected but with fewer subsistence use areas involved. The road would cause individual and community impacts related to collection of traditional foods. Alternatives A and B cross through key migratory range for the Western Arctic Caribou Herd and drainages that contain spawning grounds for sheefish and salmon, and could therefore affect resource availability for caribou and fish study communities. Alternative C does not cross through the primary migratory range for the Western Arctic Caribou Herd, but is within the herd's wintering grounds. Therefore, this alternative has a lower potential to cause changes in resource availability resulting from impacts on fall migration but could affect winter distribution or survival and therefore has a higher potential for affecting resource abundance.

Overall, detrimental changes to subsistence uses due to changes to availability or abundance of subsistence resources, or to changes in access to resources for subsistence users, would be high-likelihood, high-magnitude, long- or permanent-duration impacts over an expansive area for all

alternatives. The magnitude of impacts is high overall because the Project would impair subsistence uses for multiple communities whose subsistence use areas are bisected or partially bisected by the Project. In addition, impacts could extend beyond those directly affected communities to other communities as a result of disruption of intercommunity sharing networks or changes in the availability of caribou or fish, particularly for the 25 (caribou) and 24 (fish) study communities for whom these are resources of high importance. The magnitude of impact to subsistence access can be reasonably estimated and may be high for certain communities whose use areas are bisected or partially bisected by the road corridor. While commitments to provide for road crossings could help reduce access impacts, they would not eliminate those impacts or remove the potential for changes to communities' subsistence patterns.

Impacts to subsistence and public health, including stress, subsistence-food insecurity, and potential exposure to toxins from the road, would disproportionately negatively affect low-income and minority populations, specifically Alaska Native villages in and near the project area that depend on the surrounding area for their subsistence lifestyle.

The following section further addresses impacts to subsistence uses and resources in the context of the evaluation required by Section 810(a) of ANILCA.

4.3 ANILCA Section 810 Subsistence Evaluation

Section 810(a) of ANILCA, 16 USC 3120(a), applies to Federal determinations "to . . . lease, or otherwise permit the use, occupancy, or disposition of public lands." Because the proposed ROW would be such a land use permitted by the BLM, the BLM must determine if a ROW "would significantly restrict subsistence uses." *Id.* To do so, ANILCA Section 810(a) requires the BLM, in a process referred to as a Tier-1 evaluation, to evaluate potential impacts to subsistence uses and needs from the proposed land use and to include findings on three specific issues:

- The effect of use, occupancy, or disposition of public lands on subsistence uses and needs;
- The availability of other lands for the purposes sought to be achieved; and,
- Other alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes.

Three factors were considered when determining if a significant restriction of subsistence uses and needs may result from the proposed action, alternatives, or the cumulative case, as follows:

- Reduction in the abundance of harvestable resources used for subsistence purposes;
- Reduction in the availability of resources used for subsistence caused by alteration of their distribution, migration patterns, or location; and,
- Legal or physical limitations on access of subsistence users to harvestable resources.

Each alternative and the cumulative case were analyzed according to these criteria. An alternative would significantly restrict subsistence uses if, after consideration of protective mitigation measures, it can be expected to substantially reduce the opportunity to use subsistence resources. Substantial reductions are generally caused by large reductions in resource abundance, a major redistribution of resources, extensive interference with access, or major increases in the use of those resources by non-subsistence users.

If the analysis determines that the proposed action, alternatives, or the cumulative case may significantly restrict subsistence uses, the head of the Federal agency having jurisdiction over the federal public lands in question is required to give notice and conduct subsistence hearings in potentially affected communities. See ANILCA Section 810(a)(1) and (2), 43 USC 3120(a)(1)-(2).

The ANILCA 810 evaluation for the Ambler Road Project incorporates the expanded resource analysis contained in the Supplemental EIS, including the updated subsistence technical report (see Final Supplemental EIS, Appendix L) that describes subsistence use for 66 communities potentially impacted by the proposed Project. Namely, it incorporates new information from published research and updated data regarding the environmental effects to caribou habitat, forage, and population; the dewatering of streams and groundwater and its impact to salmon, sheefish, and other fish species; the location of spawning areas and other aquatic habitat; and related subsistence uses. New information was also considered regarding declines in salmon population in the adjacent Yukon River drainage and reduction in the Western Arctic Caribou Herd. The analysis was also expanded to include other potentially affected communities within the entire range of the Western Arctic Caribou Herd and down-stream communities along the Yukon River (see Final Supplemental EIS, Appendix M, ANILCA Section 810 Evaluation for the detailed analysis).

The ANILCA 810 evaluation was informed by public testimony given at the subsistence hearings that were held during the public comment period on the Draft Supplemental EIS in Alatna, Allakaket, Ambler, Anchorage, Evansville, Fairbanks, Huslia, Kiana, Kobuk, Kotzebue, Selawik, and Shungnak (see Transcripts posted at www.blm.gov/AmblerRoadEIS), and by associated Talking Circle meetings held in the rural communities listed above (see Final Supplemental EIS, Appendix Q, Talking Circle Summary Report). It was also informed by Indigenous Knowledge derived from ethnographic interviews, Tribal consultations, published and archival materials, and advisory bodies of traditional knowledge holders formed specifically to address subsistence issues.

In concluding the Tier 1 analysis, the BLM found in its subsistence evaluation that Alternatives A, B, C, and the cumulative case may significantly restrict subsistence uses in several communities. Specifically, the BLM found that Alternative A, the Applicant's Proposed Project, may result in a significant restriction to subsistence uses for the following 30 communities: Alatna, Allakaket, Ambler, Anaktuvuk Pass, Bettles, Buckland, Deering, Elim, Evansville, Golovin, Hughes, Huslia, Kiana, Kivalina, Kobuk, Kotzebue, Koyuk, Noatak, Nome, Noorvik, Point Hope, Point Lay, Selawik, Shaktoolik, Shishmaref, Shungnak, Unalakleet, Wainwright, White Mountain, and Wiseman.

That finding is based on the following factors:

- The construction and operation of the Ambler Road could cause population level impacts to the Western Arctic Caribou Herd and a reduction in the abundance of caribou available for residents of Alatna, Allakaket, Ambler, Anaktuvuk Pass, Bettles, Buckland, Deering, Elim, Evansville, Golovin, Huslia, Kiana, Kivalina, Kobuk, Kotzebue, Koyuk, Noatak, Nome, Noorvik, Point Hope, Point Lay, Selawik, Shaktoolik, Shishmaref, Shungnak, Unalakleet, Wainwright, White Mountain, and Wiseman. The road could delay and deflect migrating caribou, which could increase energy expenditure, impact body condition, reduce foraging rates, increase winter mortality, and decrease breeding success, pregnancy rates, and calf recruitment. Such impacts could exacerbate or prolong population declines and hinder the herd's ability to naturally recover from low population levels. Impacts to Western Arctic Caribou Herd abundance would affect communities throughout the herd's range, particularly those to which caribou are of moderate and high importance.
- The construction and operation of the Ambler Road could cause a reduction in the availability of caribou for residents of Alatna, Allakaket, Ambler, Anaktuvuk Pass, Bettles, Evansville, Huslia, Kiana, Kobuk, Kotzebue, Noorvik, Selawik, Shungnak, and Wiseman. A portion of the herd would likely be delayed or deflected by the road. If the lead caribou are disrupted then the majority of the herd could be impacted. Caribou could reduce their use of habitat within seasonal ranges, limiting availability of the resource for residents in the periphery of the herd's range. Disrupted migratory groups could scatter, reducing subsistence hunters' ability to harvest

adequate numbers of caribou efficiently. Deflected caribou would remain north of the road and would not be available for harvest in subsistence use areas for communities in the migratory or winter ranges. Delayed caribou could move through traditional hunting areas later in the year, which could preclude the availability of bulls for subsistence harvest due to the timing of the rut. Delayed animals could move through areas faster, limiting their availability for communities along migratory routes. Caribou movements and migration are often predictable but are also inherently variable. As such, the magnitude of impacts to caribou availability would likely vary from year to year but would not affect all communities equally. It is likely these communities would experience long term reductions in caribou availability if historic migratory routes and movement patterns are disrupted due to delays or deflections as described above.

- The construction and operation of the Ambler Road could cause population level impacts to fish and a reduction in the abundance of harvestable fish for the communities of Alatna, Allakaket, Ambler, Anaktuvuk Pass, Bettles, Buckland, Evansville, Hughes, Huslia, Kiana, Kobuk, Kotzebue, Noatak, Noorvik, Selawik, Shungnak, and Wiseman. Increased sedimentation from construction and operation activities and infrastructure, particularly in spawning grounds, could smother eggs, alter feeding habitat, and decrease fish production. If sedimentation increased in any of the spawning areas, there could be adverse impacts to spawning success of sheefish, salmon, whitefish, and other resident species. The presence of the road in addition to related culverts, bridges, and gravel infrastructure could also alter and degrade fish habitat both upstream and downstream from the road, which could affect fish abundance. Spills could substantially degrade habitat quality and affect the long-term health of individual fish and fish populations.
- The construction and operation of the Ambler Road could cause a reduction in the availability of fish for the communities of Alatna, Allakaket, Ambler, Anaktuvuk Pass, Bettles, Buckland, Evansville, Hughes, Huslia, Kiana, Kobuk, Kotzebue, Noatak, Noorvik, Selawik, Shungnak, and Wiseman. Changes in the availability of fish species from the proposed action could affect subsistence users throughout the project area upstream and downstream from the project area, particularly if the Project results in changes in fish distribution or the timing of fish migrations. Fish could be diverted, displaced, or obstructed due to culvert placement, excavation, or stream diversions. Temporary changes to habitat resulting from water withdrawals, runoff from melting ice roads, and construction activities could affect fish distribution. Potential contamination from dust deposition, spills, or perceived contamination from asbestos and other toxic chemicals could have indirect effects on subsistence, as subsistence users could reduce their consumption of a resource if they fear contamination; therefore, resources perceived as unhealthy or contaminated are considered unavailable to local residents.
- The construction and operation of the Ambler Road could cause a reduction in access for the communities of Alatna, Allakaket, Ambler, Bettles, Evansville, Kobuk, and Shungnak. Overland access to subsistence use areas would likely be impeded by the road. If delayed or deflected caribou migrate through areas later in the year, access to these animals could be impossible due to ice conditions on river systems that subsistence hunters use to access traditional caribou crossing and hunting areas. Road and bridge construction could result in subsistence users being unable to access subsistence use areas.

The BLM similarly found that Alternative B may significantly restrict subsistence use for the same communities as Alternative A, based on the same rationale regarding impacts to caribou abundance and availability, fish availability, and subsistence access. In addition, Alternative B could result in greater impacts to fish abundance, because the route for Alternative B would place a river crossing seven miles from sheefish spawning habitat on the Reed River. Moving a crossing closer to the concentrated area of sheefish spawning habitat could increase the potential for sediment impacts from construction, erosion, degradation, and contamination of the habitat from accidental spills.

Alternative C also may significantly restrict subsistence uses, but would affect a different set of communities and would cross through different key habitat areas. The BLM found that Alternative C may result in a significant restriction to subsistence uses for the following 31 communities: Alatna, Allakaket, Ambler, Anaktuvuk Pass, Bettles, Buckland, Deering, Elim, Evansville, Golovin, Hughes, Huslia, Kiana, Kivalina, Kobuk, Kotzebue, Koyuk, Noatak, Nome, Noorvik, Point Hope, Point Lay, Selawik, Shaktoolik, Shishmaref, Shungnak, Stevens Village, Unalakleet, Wainwright, White Mountain, and Wiseman.

Alternative C would be less likely to have direct impacts on sheefish spawning grounds in the Kobuk and Alatna rivers, but would require a crossing on the Koyukuk River near Hughes in a documented sheefish spawning habitat. In addition to sheefish spawning grounds, Alternative C also crosses streams that support spawning for Chinook and chum salmon. Impacts to salmon spawning grounds under Alternative C could have larger effects to communities that harvest salmon downstream from the road corridor along the Yukon and Koyukuk rivers. Over 80 miles of the Alternative C route (compared to 20 or fewer miles under Alternatives A and B) would occur within 1,000 feet of major floodplains or streams, increasing the risk of downstream effects to fish and subsistence uses of fish.

Alternative C would occur within the Western Arctic Caribou Herd wintering grounds and affects a greater amount of Western Arctic Caribou Herd habitat. Loss of winter habitat would be particularly detrimental to the Western Arctic Caribou Herd due to the herd's difficulty in accessing lichen during winter. Past Western Arctic Caribou Herd population declines have been attributed to extreme winter weather conditions, a resulting lack of access to lichen, and high winter mortality. Alternative C would cross caribou subsistence use areas for 10 communities (versus nine communities under Alternative A). Alternative C places the ROW through the middle of the entire Ray Mountains Herd range; it bypasses the Hodzana Hills Herd range and passes through the peripheral and winter range of the Western Arctic Caribou Herd. This alternative intercepts only a small portion of the migratory area of the Western Arctic Caribou Herd. While Alternative C crosses more Western Arctic Caribou Herd habitat than the other alternatives and would be more likely to affect wintering habitat, the alternative may have a lesser impact on fall and spring migrations because it only intercepts a small portion of their migratory range. This would reduce the potential for impacts to caribou resource availability resulting from road deflection and displacement.

Compared to Alternatives A and B, Alternative C crosses areas of higher value moose habitat and therefore could have greater impacts to moose availability in nearby communities for whom moose is a resource of high importance (Alatna, Allakaket, Hughes, Huslia). In terms of user access, Alternative C crosses subsistence use areas for the same number of communities as Alternative A (12 communities), but a different set of communities: Alatna, Allakaket, Ambler, Anaktuvuk Pass, Hughes, Huslia, Kobuk, Selawik, Shungnak, Stevens Village, and Tanana. Communities with the highest number of resource use areas crossed (five or more) include Alatna, Allakaket, Ambler, Hughes, Kobuk, Shungnak, and Stevens Village. Hughes, Kobuk, and Shungnak would have their hunting areas bisected by the Project.

The cumulative impacts to subsistence resulting from the proposed road, other reasonably foreseeable developments, and climate change could result in reduced harvesting opportunities for local residents and alterations in subsistence harvesting patterns. The road and associated mineral development, in addition to other reasonably foreseeable activities, would likely contribute to cumulative impacts on subsistence resource abundance and availability. The development of mines within the District and secondary access roads would result in habitat loss, alteration, and fragmentation of Western Arctic Caribou Herd migratory and winter range, which could affect the abundance and availability of caribou to some or all of the 42 Western Arctic Caribou Herd Working Group communities. The mines, mining roads, and secondary access roads would increase habitat fragmentation exponentially. The fragmentation of habitat

would further remove usable habitat for caribou during migration and winter, which could force substantial range shifts, increased competition for resources, or increased predation (NCASI 2008).

Reasonably foreseeable future actions that would impact fish include advanced mining development and secondary access roads. In addition to associated mining development and future infrastructure development, the Ambler Road would increase potential impacts to resource abundance and resource availability for key fish resources such as sheefish, whitefish, and salmon. Direct and indirect chemical stressors such as mining-related pollution, acid mine drainage, and the release of toxic materials have the potential to significantly impact aquatic life health and the survival of fish populations (Limpinsel et al. 2017). Toxic metals that bioaccumulate in fish tissue can lead to fish mortality, increased susceptibility to disease, and reduced growth rates, and pose health risks to human consumers (Hughes et al. 2016). Mining related removal of groundwater would lower the water table well below natural stream or lake levels and considerably reduce flow into streams and the hyporheic zone. Depending on the location and scale of operation, dewatering has the potential to substantially reduce groundwater flows into important spawning, egg incubating, and wintering habitats relied upon by salmon, sheefish, whitefish, and other important subsistence species, which could have potential population level impacts.

Given the proximity of the four most advanced mine projects to the Kobuk River sheefish spawning grounds and the large numbers of sheefish that spawn in this habitat, sheefish may be especially vulnerable to population-level effects from mine related dewatering, large scale spills, or leaching of acid rock into waterways. Maintaining spawning habitat is critical to the survival of the Kobuk and Yukon rivers sheefish and whitefish populations because a large fraction of any given spawning population may spawn in a small, distinct geographic area. Cumulative impacts to sheefish populations would most likely occur for fish study communities in the Kobuk-Selawik and Koyukuk river basins. Salmon populations are also vulnerable to cumulative impacts. Since the 1990s, chum and Chinook salmon returns have declined, and the Alaska Department of Fish & Game considers Chinook salmon as a "stock of yield concern." In the past few years Chum and Chinook salmon runs have declined even further, leading to subsistence closures in the Yukon River watershed. If these trends continue, and in combination with the cumulative impacts of the road, mining activity, and other reasonably foreseeable future actions, communities in the Kobuk-Selawik, Koyukuk, and Yukon river basins could experience reduced harvest success for this key resource.

The ANILCA 810 evaluation determined that the cumulative case may significantly restrict subsistence uses for the following 34 communities: Alatna, Allakaket, Ambler, Anaktuvuk Pass, Bettles, Buckland, Coldfoot, Deering, Elim, Evansville, Golovin, Hughes, Huslia, Kiana, Kivalina, Kobuk, Kotzebue, Koyuk, Noatak, Nome, Noorvik, Nuiqsut, Point Hope, Point Lay, Selawik, Shaktoolik, Shishmaref, Shungnak, Stevens Village, Unalakleet, Utqiagvik, Wainwright, White Mountain, and Wiseman.

Because there may be a significant restriction on subsistence use, the BLM undertook the notice and hearing procedures required by ANILCA Section 810(a)(1) and (2) in conjunction with release of the Draft Supplemental EIS, solicited public comment from the potentially affected communities, and held 12 public hearings in the vicinity of the affected communities. The BLM ensured that the comments and testimony on impacts to subsistence informed the analysis of alternatives in the Final Supplemental EIS and the final ANILCA Section 810 Evaluation (Appendix M of the Final Supplemental EIS).

4.4 ANILCA Title XI

Sections 1101 through 1107 of Title XI of ANILCA address the proposed construction of "transportation and utility systems." The term "transportation or utility system" is defined in Section 1102(4)(A) of ANILCA to include road systems for which "any portion of the route of the system will be within any conservation system unit, national recreation area, or national conservation area in the State (and the

system is not one that the department or agency having jurisdiction over the unit or area is establishing incident to its management of the unit or area)." Gates of the Arctic National Preserve (GAAR) is a "conservation system unit" as that term in used in Section 1102(4)(A) and is defined in Section 102(4) of ANILCA. Accordingly, because the route of the proposed road would traverse a conservation system unit, AIDEA filed its application for a BLM ROW grant (and other federal authorizations) pursuant to Title XI of ANILCA. See Section 1.1 above (Background).

Section 1104 of ANILCA outlines the specific steps for processing applications to develop transportation or utility systems such as the proposed Ambler Road Project. Section 1104(g)(2) states: "The head of each Federal agency, in making a decision [regarding a transportation or utility system], shall consider, and make detailed findings supported by substantial evidence, with respect to [eight factors]." Expanding on the rural, traditional lifestyles aspect of the 1104(g)(2)(D) factor, the Department's regulation implementing Section 1104(g), 43 CFR 36.7, adds one additional factor, "Impacts, if any, on subsistence uses," which also is to be considered.

The nine factors and findings, as relevant to the BLM, are addressed below.

(A.) The need for, and economic feasibility of, the transportation or utility system

AIDEA's application states that it is pursuing construction of an industrial access road consistent with its mission to increase job opportunities and otherwise encourage the State's economic growth, including development of natural resources. Specifically, AIDEA's goal is to support mineral resource exploration and development in the District. The road would provide surface transportation access to the District and allow for expanded exploration, mine development, and mine operations at mineral prospects throughout the District. AIDEA indicates that surface transportation access would help bring high-value mineral resource areas into production.

AIDEA's plan calls for issuance of revenue bonds as a principal tool to finance the construction of the Project. These taxable bonds would be sold through private placements to various potential buyers (e.g., banks, investment funds, high-net-worth individuals, and others). In the event that the Project is not successful, the investors or bondholders who purchased bonds to finance the Project assume the risk of the Project's revenues falling short. AIDEA has separate bonding authority and a separate bond rating from the State of Alaska. Bonds issued by AIDEA do not become a liability of the State and, therefore, would not affect the State's bond rating. The bonds would be repaid by assessing annual fees on the users of the — industrial developers of mines in the District — through a lease agreement. Funding for maintenance and operations and ongoing mitigation costs would be obtained through user fees, a pass-through charge to the mining companies using the road. Therefore, the economic feasibility of the Ambler Road and associated fiber optic/communications utility system is a business decision of AIDEA and its investors, and is ultimately based on the economic feasibility of the mines proposed in the District. As of June 2024, only mining exploration has occurred. There are no mine developments in the area and no mine plan proposals pending before the federal government.

(B.) Alternative routes and modes of access, including a determination with respect to whether there is any economically feasible and prudent alternative to the routing of the system through or within a conservation system unit, national recreation area, or national conservation area and, if not, whether there are alternative routes or modes which would result in fewer or less severe adverse impacts upon the conservation system unit.

The BLM evaluated a full range of alternative routes and modes of access to identify reasonable alternatives to the proposal submitted by AIDEA. The evaluation included consideration of economic feasibility and prudence. Final Supplemental EIS Appendix G: Alternatives Development Memorandum provides the detailed process used to rescreen and reevaluate potential routes and modes of access for the

Supplemental EIS. After screening, three routes for an overland access road were evaluated in detail. Alternative A is the most direct and shortest overall route. Alternative B overlaps Alternative A for most of its length, but dips to the south at approximately milepost 100 in order to traverse less of the GAAR Preserve. Alternative C is a much longer alignment that avoids GAAR and other Conservation System Units altogether.

All of the action alternatives analyzed in the Supplemental EIS are feasible and would provide access to the District, but Alternative C would cost substantially more to construct and maintain than the other alternatives. The estimated cost for construction of the road and associated facilities by alternative is: Alternative A, \$672.4 million; Alternative B, \$721.0 million; and Alternative C, \$1.28 billion. Annual maintenance for each alternative is estimated to be: Alternative A, \$11.9 million; Alternative B, \$12.7 million; and Alternative C, \$18.5 million.

(C.) The feasibility and impacts of including different transportation or utility systems in the same area.

AIDEA has proposed to locate the Project in an area that is currently devoid of infrastructure and development, including other transportation and utility systems. As submitted, the 2016 revised application is for a proposed 250-foot-wide road corridor with associated facilities including three airstrips; maintenance pads and buildings; material sites and associated access roads; and constructions camps. In 2019, AIDEA amended the application to include communications systems, including a fiber optic line within the proposed road embankment and 100-to-150-foot-tall radio towers to be located at each maintenance station.

The intent of the road is to provide access to the District to facilitate mining exploration and development. As such, it is feasible and likely that additional roads will be constructed from the proposed Ambler Road to future mine developments. The application also contemplates and allows for communities located in the vicinity of the road to use the road for commercial deliveries of goods and services. In order to partake in this benefit, communities would need to establish their own transportation connection to the road corridor, either through road construction or by some other method, such as a seasonal ice road/snow trail or by river. Likewise, communities may also desire to connect to the proposed fiber optic line.

These reasonably foreseeable future transportation and utility systems (in the event the Project was constructed) are included in the cumulative effects analysis presented in Chapter 3 of the Final Supplemental EIS. However, their scope and scale are uncertain, as are their specific route locations and settings.

(D.) Short- and long-term social, economic, and environmental impacts of national, state, or local significance, including impacts on fish and wildlife and their habitat, and on rural, traditional lifestyles.

Short- and long-term environmental, social, and economic impacts of national state and local significance are described in detail in the Final Supplemental EIS (see Chapter 3, Affected Environment and Environmental Consequences and accompanying appendices). The following summarizes the major impacts on fish and wildlife and their habitat, and on rural, traditional lifestyles:

Besides direct fill in wetland and vegetation habitat due to road construction, the areas near the
road would be affected by road dust, noise, movement, and light or shading (at culverts and
bridges), and potentially spills of pollutants from truck traffic. The road would impact fish habitat
and alter free fish passage based on likely changes to channels, flows, and sedimentation, and due
to impacts caused by culverts, bridge piers, alteration of surface and subsurface flow patterns, and
other effects. Nonpoint-source pollutants in runoff and from dust as well as spills or leaks of toxic

material could affect fish health and could damage spawning and rearing habitat. There are few known sheefish spawning areas in Alaska, and two are in the project area. Sedimentation, whether from thawing permafrost, dust and road spray, or runoff, can introduce pollutants to streams in the form of fine sediment, which could impact juvenile salmonid gill function or egg stage oxygen diffusion across the egg membrane. These same sediment inputs have the potential to influence pH through introduction of metals that are particularly harmful to egg and rearing juvenile stages of fish. Runoff from the road, even if not contaminated by spills, may alter downstream water chemistry and reduce egg survival and affect fish populations. Even small changes in water quality could have substantial consequences to fish populations.

- The proposed road would fragment wildlife habitat. Caribou migration patterns and movements of other wildlife would be affected by the presence of a road and road noise. Changes in migration could alter where caribou spend their winters and summers; could affect energy expenditure of the animals; and, with other herd pressure from other developments and climate change, could affect calving and survival rates. Construction and use of the road would cause behavioral disturbance to and displacement of caribou and other mammals due to human activity, including noise and light pollution. Disturbance and displacement would occur during all phases of construction and operations and during road closure and reclamation. Behavioral disturbance could result in an increase in energy expenditure due to higher stress levels and an increase in startle and flight responses. Behavioral changes could result in reduced foraging rates and decreased mating success. Injury and mortality of caribou may also occur as a result of the road and airstrips, especially in forested or mountainous sections of the road, such as within the Ray Mountains or foothills of the Brooks Range, where sight lines are reduced.
- Road access to this remote, largely undeveloped area would introduce more human activity and development that would detract from the rural, traditional lifestyle and could forever change the culture and traditional practices of the Alaska Native communities. Local residents are concerned that competition for subsistence resources could increase and subsistence resource availability would be reduced, which would also affect their lifestyle. The potential benefits of job creation and access to goods through commercial delivery could also have a negative effect on the lifestyle of the community by building more reliance on the cash economy and shifting residents away from subsistence. These influences may be removed if and when the road is closed and reclaimed, but it is unclear whether cultural shifts that occur while the road is in use (estimated to be 50 years) would shift back, and there is uncertainty regarding the process of reclamation of the road, whether it would be successful, whether and how it would be funded and conducted, and whether reclamation could result in additional environmental harm.

See also Sections 4.2 and 4.3 above for discussion of additional impacts on fish and wildlife and their habitat, and on rural, traditional lifestyles, including significant impacts to subsistence uses and resources.

(E.) The impacts, if any, on the national security interests of the United States that may result from approval or denial of the application for a transportation or utility system.

The application submitted by AIDEA is for a road intended to support mineral resource exploration and development. Mineral exploration has occurred in the District since the 1950s; however, no mines have been developed, and no plans of development are pending before the federal government. Final Supplemental EIS Appendix H: Indirect and Cumulative Scenarios includes a detailed reasonably foreseeable mine development scenario prepared by the BLM to assess the potential cumulative impacts of the associated mining exploration and development supported by the road. This scenario uses the best information available based on past and present exploration of the District, and discusses four mineral deposit prospects, the Bornite, Arctic, Smucker, and Sun deposits.

Executive Order (EO) 13603, National Defense Resource Preparedness, issued on March 16, 2012, delegates to the Secretary of Defense, and the Secretary of the Interior in consultation with the Secretary of Defense, authority "to encourage the exploration, development, and mining of strategic and critical materials."

EO 13817, A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals, issued on December 20, 2017, establishes as federal policy the need to identify new sources of critical minerals; increase activity at all levels of the supply chain, including exploration, mining, concentration, separation, alloying, recycling, and reprocessing critical minerals; ensure that our miners and producers have electronic access to the most advanced topographic, geologic, and geophysical data within U.S. territory; and streamline leasing and permitting processes to expedite exploration, production, processing, reprocessing, recycling, and domestic refining of critical minerals. As defined by EO 13817, a critical mineral is a non-fuel mineral or mineral material essential to the economic and national security of the United States, the supply chain of which is vulnerable to disruption, and that serves an essential function in the manufacturing of a product, the absence of which would have significant consequences for our economy or our national security. As directed by the Energy Act of 2020 (Pub. Law 116-260), the U.S. Geological Survey (USGS), on behalf of the Secretary of the Interior, published the most recent version of the critical minerals list on February 24, 2022 (87 FR 10381). The Energy Act of 2020 requires the critical mineral list to be updated at least every three years.

The Bornite deposit contains cobalt and the Arctic, Smucker, and Sun deposits all contain zinc, both of which are on the USGS's 2022 critical minerals list. The Arctic Project is the most advanced mining project in the District and is the only project with a developed feasibility study, which is used to assist in establishing financing and considered a necessary precursor for eventual mine development. As of 2023, an estimated 40.2 million tonnes of valuable minerals have been identified at the Arctic Project, including some amount of copper, zinc, lead, gold, and silver. The Bornite deposit is estimated to contain approximately 202.7 million tonnes of primarily copper resources. The Sun deposit is estimated to contain 11 million tonnes of mineral resources including silver, copper, lead, zinc, and gold. The Smucker deposit is estimated to contain about 11.6 million tonnes of mineral resources in the form of copper, zinc, lead, silver, and gold. All deposits are in the exploration stage, with various amounts of data gathered and made public. Mineral resources are not the same as mineral reserves and do not indicate a determination has been made that the resources are economically minable or that these numbers represent the maximum extent of the resource that may be minable at each deposit. The proposed Ambler Road could provide the access necessary for the eventual development and production of these minerals, or other as-yet unidentified developable deposits of minerals in furtherance of the national security interests of the United States.

(F.) Any impacts that would affect the purposes for which the federal unit or area concerned was established.

The BLM lands that AIDEA's proposed route crosses are not part of any conservation system unit, national recreation area, or national conservation area with specific purposes for which they were established. In general, these BLM-managed public lands are managed pursuant to FLPMA on the basis of multiple use and sustained yield and in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use. Public lands are also managed in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber.

The term "multiple use" means the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific, and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output. 43 USC 1702(c).

(G.) Measures which should be instituted to avoid or minimize negative impacts.

The BLM considered a robust suite of potential mitigation measures (see Final Supplemental EIS Appendix N, Potential Mitigation) that could serve to avoid or minimize adverse impacts. The effectiveness of each potential mitigation measure in avoiding or reducing impacts is presented, and for each resource section or subsection, the expected effectiveness of the mitigation measures if collectively applied is discussed.

(H.) The short- and long-term public values which may be adversely affected by approval of the transportation or utility system versus the short- and long-term public benefits which may accrue from such approval.

Based on the public comment record for the Ambler Road EIS, the public values many things about the project area in its existing condition, including particularly:

- Subsistence opportunities; subsistence resources such as caribou, moose, salmon, and sheefish; and the continuation of the traditional rural lifestyle and Native cultures that have subsistence as the central feature.
- Large tracts of natural lands and waters with intact ecosystems, substantially without roads, airports, and signs of human habitation.
- The importance of the area for human health, both physical and mental well-being, and the significance of the area as a place of healing and for Iñupiaq and Athabascan spiritual connectivity.
- Respect for places of significance within the landscape, including sites that connect local residents with their ancestors, and places that should be avoided or left alone.
- Recreation opportunity and recreation/tourism-based business opportunity in the area, including backpacking, river floating/boating, fishing, sport hunting, camping, flightseeing, lodge stays, and guiding for many of these activities.

These values would be adversely affected by the road and resulting mines (see Final Supplemental EIS Chapter 3, Affected Environment and Environmental Consequences).

Short- and long-term public benefits that could result from the Project are discussed in detail in the Final Supplemental EIS (see Chapter 3 Section 3.4.5, Socioeconomic and Communities). These benefits include the following:

- The road could provide 360 jobs during the 4-6 year construction period, 292 of which are estimated to be filled by local residents and other Alaskans, and 81 jobs during the 44-46 year operation period. Most of these direct, on-site jobs would be in the heavy civil construction trade, including heavy equipment operators, site engineers, construction managers, and construction laborers. The road would also potentially provide an additional 406 indirect or induced jobs during construction, and 61 during operations.
- The road is expected to induce greater mineral exploration within the District and result in development of mines. Mining exploration and development are considered cumulative effects of the road, and could result in additional jobs for Alaskans and residents of the local area.
- The Northwest Arctic Borough, and ANCSA Native corporation landowners would be expected to accrue taxes, fees, and other economic benefits, including rental payments to the State's General Fund that would benefit the State as a whole.
- Communities nearest to the road, particularly Kobuk, Shungnak, and Ambler near the western end and Bettles and Evansville nearer to the eastern end, would have the opportunity to connect to the Project's fiber optic cable and benefit from greater internet bandwidth and speed, allowing greater participation in e-commerce, telemedicine, and general communications. Similarly, the same communities and area residents/landowners near the road may be able to receive commercial deliveries via the road, which could lead to reductions in their cost of living (lower fuel and grocery prices).
- Society as a whole would be expected to benefit from the copper and other metals, including zinc, lead, gold, and silver, to which the road would provide access.
- (I.) Impacts, if any, on subsistence uses.

Impacts on subsistence uses are addressed in Section 4.3 above.

4.5 Rationale for Decision Adopting the No Action Alternative and Terminating the BLM ROW Grant

In accordance with the remand order of the court, the BLM has addressed the legal deficiencies in the prior decision – and in particular has fully analyzed the subsistence impacts of the proposed Project under Section 810 of ANILCA. As described in more detail below, it has determined that it cannot grant and hereby terminates the previously issued BLM ROW Grant. Further, even if it has the legal authority to grant a ROW, the BLM hereby exercises its discretion under FLPMA and pursuant to Section 1104(g) of ANILCA to decline to do so and terminates the ROW accordingly.

ANILCA Section 810(a) provides that no "withdrawal, reservation, lease, permit, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected" until the federal agency gives the required notice and holds a hearing in accordance with ANILCA Section 810(a)(1) and (2) and makes the three determinations required by ANILCA Section 810(a)(3). The three determinations that must be made before such a use of the public lands can be authorized are: 1) that "such a significant restriction of subsistence use is necessary, consistent with sound management principles for the utilization of the public lands"; 2) that "the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other such disposition"; and 3) that "reasonable steps will be taken to minimize adverse impacts to subsistence uses and resources resulting from such actions." 16 USC 3120(a)(3)(A)-(C).

As outlined in Appendix M of the Final Supplemental EIS (ANILCA Section 810 Evaluation) and summarized in Section 4.3 of this ROD, because the BLM found in the ANILCA Section 810 subsistence

evaluation that Alternatives A, B, C, and the cumulative case may significantly restrict subsistence uses in several communities, the agency gave notice and conducted hearings, as required by ANILCA Section 810(a)(1) and (2). However, the BLM is unable to make the determinations required by ANILCA Section 810(a)(3) for AIDEA's proposed route (Alternative A) or any of the other action alternatives (Alternatives B & C). Specifically, the BLM is unable to determine that the significant restriction of subsistence use for 30 or more communities—30 for Alternatives A & B, 31 for Alternative C, and 34 for the cumulative case—is necessary, consistent with sound management principles for the utilization of the public lands. This would be the case even if the BLM were to adopt all reasonable mitigation measures analyzed in the Final Supplemental EIS intended to reduce impacts to subsistence resources and uses. Consequently, ANILCA precludes the BLM from granting (or maintaining) the ROW across BLM-managed lands under any of the action alternatives.

Regarding the nature and extent of the restrictions on subsistence use, the BLM found that under the cumulative case, which takes into account the effects of each of the action alternatives in conjunction with all past, present, and reasonably foreseeable future activities in or near the proposed Ambler Road, the construction and operation of the Ambler Road may cause significant restrictions on subsistence uses for 34 communities spread across a broad region of Alaska, regardless of reasonable steps that could be taken to minimize such adverse impacts on subsistence uses and resources. Section 4.3 above summarizes BLM's subsistence-related findings for each of the action alternatives and the cumulative case. See Appendix N of the Final Supplemental EIS (Potential Mitigation) for a description of potential mitigation measures considered in the Final Supplemental EIS.

During the Supplemental EIS process, the concerns described at Appendix M regarding impacts to subsistence resources and uses were shared with the BLM by residents of the communities for which subsistence uses may be significantly restricted by the proposed Project. See, for example, the Talking Circle Report included as Appendix Q of the Final Supplemental EIS. Furthermore, during government-to-government consultations with the BLM, several Tribes representing those communities expressed similar concerns.

For the reasons expressed in Section 4.3, the restriction on subsistence uses and resources is significant in terms of the number of communities impacted, the number of critical subsistence resources impacted, and the nature of the reductions in resources and subsistence users' access to those resources. Section 810 of ANILCA provides that the BLM may only approve the proposed action or any alternative action if it determines that the restriction on subsistence uses is "necessary, consistent with sound management principles for the utilization of the public lands." 16 USC 3120(a)(3)(A). The BLM hereby finds that the restriction to subsistence uses that would result from approval of a ROW across BLM-managed lands is not "necessary" to impose in the name of "sound management" for the utilization of the public lands.

What constitutes "sound management" is informed by FLPMA's directive that the BLM manage the public lands under principles of multiple use and sustained yield. 43 USC 1732(a). That means thoughtful development in the right places to drive economic opportunities for local communities. It also means protecting natural, cultural, and historical resources and existing community uses. Both of those modes of sound management of the public lands are embraced by FLPMA's definition of "multiple use," which encompasses "the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people" alongside the "harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output." 43 USC 1702(c).

The proposed action, and related action alternatives, seek to use BLM-managed public lands in a manner that would provide some level of economic benefit to the local, state, and national economy from road construction and would support future mining of minerals. Those benefits, as presented by the proponent, analyzed in the Supplemental EIS (see Final Supplemental EIS, Section 3.4.5 – Socioeconomics and Communities) and summarized in Section 4.4 above, even when taken at face value for purposes of this Decision, are not sufficient to support a BLM determination that the significant restriction on subsistence uses that would result from any of the action alternatives is "necessary," as ANILCA requires. Rather, the BLM finds that selecting the No Action Alternative and terminating the previously issued right-of-way grant best reflects sound management of the public lands to meet the present and future needs of the American people, including Alaska Natives and other rural residents in the vicinity of the proposed road.

Although this Decision is independently based on the BLM's lack of discretion to approve an action alternative when it cannot make the ANILCA Section 810(a)(3) determinations as discussed above, largely for the same reasons that the BLM is unable to make the Section 810(a)(3) determinations the agency also hereby separately and independently exercises its discretion under FLPMA and pursuant to Section 1104(g) of ANILCA to select the No Action Alternative and terminate the previously issued BLM ROW Grant.

Under FLPMA, the BLM has significant discretion to approve or deny potential uses of the public lands in the course of managing those lands under principles of multiple use and sustained yield. See 43 USC 1732(a)-(b). The principle of multiple use necessarily obliges the BLM to consider and weigh a range of potential uses of the public lands, including for rights-of-way but also including for conservation, among other uses, while the principle of sustained yield requires that this balancing be done with consideration for the maintenance of natural resources. FLPMA's definition of the term "multiple use" confirms this, encompassing as it does, in pertinent part, "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources" and the "harmonious and coordinated management of the various resources [of the public lands] without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output." 43 USC 1702(c). In implementing these provisions, under FLPMA, the BLM necessarily has the discretion to approve or deny a particular proposed use of the public lands. See 43 USC 1732(b); see also New Mexico ex rel. Richardson v. BLM, 565 F.3d 683, 710 (10th Cir. 2009) ("It is past doubt that the principle of multiple use does not require BLM to prioritize development over other uses . . . BLM's obligation to manage for multiple use does not mean that development must be allowed Development is a possible use, which BLM must weigh against other possible uses—including conservation to protect environmental values.").

The BLM's broad discretion under FLPMA extends specifically to its consideration of proposed ROWs under Title V of FLPMA and its implementing regulations, which authorize the BLM to grant, grant with modifications, or deny proposed ROWs over areas of public lands. *See* 43 USC 1761(a); 43 CFR 2802.10 ("In its discretion, BLM may grant rights-of-way on any lands under its jurisdiction," subject to certain limitations not applicable here). The BLM's ROW regulations expressly provide that the BLM can deny an application if the BLM determines that the proposed use of the public lands would not be in the public interest, or that doing so would be inconsistent with FLPMA or other applicable laws or regulations. See 43 CFR 2804.26(a)(2), (4).

Thus, separate and apart from Section 810(a)(3) of ANILCA, the BLM hereby exercises its discretion under FLPMA to deny the application for a ROW and terminate the previously issued ROW Grant. In reaching this conclusion, the BLM has considered the interests that would be served from construction of the road—providing access to deposits of minerals so that they may be developed and sold—and weighed

them against the interests in protecting existing, important resources and subsistence uses that would be served by denying a ROW to construct a road across BLM-managed land. In doing so, the BLM has used the framework provided by Section 1104(g)(2) of ANILCA to consider relevant factors that weigh in favor of and against approval of the proposed ROW.

As discussed in Section 4.4 of this ROD, under Section 1104(g)(2) of ANILCA and implementing regulation 43 CFR 36.7, there are nine factors an agency is to consider in making a decision on an application for a transportation and utility system submitted under Title XI of ANILCA. Having closely considered each of these factors (see Section 4.4 above), in this Decision the BLM disapproves the application for a ROW across BLM-managed lands and terminates the previously issued BLM ROW Grant. In doing so, the BLM finds that, even if the agency were to adopt all reasonable mitigation measures analyzed in the Final Supplemental EIS intended to reduce impacts to important resources and subsistence uses (see 43 CFR 36.7(a)(2)(vii)), under each alternative route analyzed (see 43 CFR 36.7(a)(2)(ii)) the proposed road's significantly adverse short and long term social and environmental impacts, including impacts on fish and wildlife and their habitat and on rural, traditional lifestyles including subsistence uses, and associated adverse impacts to public values in the affected communities (see 43 CFR 36.7(a)(2)(iv), (viii) and (ix)) substantially outweigh other relevant factors including the need for and potential economic benefits of the road and impacts on national security interests (see 43 CFR 36.7(a)(2)(i), (iv) and (v)). For the same reasons, approving the ROW across BLM-managed lands would not be in the public interest.

In considering the foregoing factors and impacts and reaching this Decision to disapprove a ROW across BLM-managed lands and to terminate the previously issued ROW Grant, the BLM also considered the direction in Section 201(4)(b) of ANILCA (16 USC 410hh(4)(b)) that the Secretary permit access across the Western (Kobuk River) unit of the Gates of the Arctic National Preserve, lands that are managed by the National Park Service. On its face, this statutory provision, which is contained in a title of ANILCA (Title II) that solely pertains to the National Park System and a section of ANILCA (Section 201) that solely pertains to a particular unit of the National Park System, Gates of the Arctic National Park and Preserve, does not address access across BLM-managed lands. Furthermore, there is no other provision in ANILCA or other law which directs the Secretary to provide access across the BLM-managed lands associated with the proposed Project.

Since the outset of its processing of the application for a ROW, the BLM has consistently maintained that ANILCA Section 201(4) does not address BLM-managed public lands and that the No Action Alternative is therefore a legally viable option for a BLM decision on the application. For example, the BLM's Notice of Intent to prepare the 2020 EIS states:

The proposed road would cross roughly 24 miles of BLM-managed lands in total. In addition, approximately 26 miles of the proposed road would cross the Gates of the Arctic National Preserve, a conservation system unit (CSU) established by ANILCA section 201(4). *This section of ANILCA specifically directs the Secretary of the Interior to authorize the road through the Preserve but does not address other public lands.* 82 Fed. Reg. 12119, 12120 (Feb. 28, 2017) (emphasis added).

And the 2020 EIS itself provides:

In ANILCA, Congress approved only access across the National Preserve portion of Gates of the Arctic National Park and Preserve (GAAR), exempting from NEPA the decision of where that route should go. *Congress did not make a similar exemption for BLM-managed lands* or for other federal permits that would be required. The purpose of this EIS, therefore, is to disclose to the public and federal decision makers impacts of the proposal in accordance with NEPA, *before the BLM decides whether to issue a ROW authorization*. 2020 EIS, p. ES-1 (emphasis added).

Ultimately, the BLM, in consultation with cooperating agencies, will make a decision to select one of the alternatives evaluated, *including the No Action Alternative*. The decision will be documented in a Record of Decision (ROD) that identifies the final decision and the mitigation and stipulations required of AIDEA *if the ROW authorization is approved*. 2020 EIS, p. ES-1 (emphasis added).

The No Action Alternative evaluates what would occur if the BLM does not grant a road ROW to AIDEA and no road is built. Federal agencies are required to evaluate taking no action as an alternative in an EIS. The No Action Alternative provides a baseline for comparison to the other alternatives, *and it is a potential outcome of the EIS*. 2020 EIS, p. ES-2 (emphasis added).

In ANILCA Section 201(4)(b), Congress anticipated surface transportation access across GAAR from the District to the Alaska Pipeline Haul Road (Dalton Highway). Per ANILCA, this congressionally approved access through GAAR is not subject to NEPA. Instead, ANILCA directs the Secretaries of the U.S. Department of the Interior (DOI) and U.S. Department of Transportation (USDOT) to jointly prepare an Environmental and Economic Analysis (EEA) to determine the route through GAAR and develop terms and conditions for issuance of the NPS ROW permit. *However, ANILCA included no such specific provision for access across BLM-managed lands*. 2020 EIS, p. 1-2 (emphasis added).

5.0 PUBLIC INVOLVEMENT

Public involvement is an integral part of the NEPA process and is required in the preparation and implementation of agencies' NEPA procedures. Public involvement provided an opportunity for the public and agencies to express their views and help identify issues to be addressed in the Supplemental EIS and to provide comments on the Draft Supplemental EIS.

The BLM hereby certifies that the agency has considered all of the alternatives, information, analyses, and objections submitted by State, Tribal, and local governments and public commenters for consideration by the lead and cooperating agencies in developing the Final Supplemental EIS.

5.1 Public Notices

Public Notice dates:

- Notice of Intent to prepare an EIS: February 28, 2017
- Notice of Availability of Draft EIS: August 30, 2019
- Notice of Availability of Final EIS: March 27, 2020
- Notice of Intent to Prepare a Supplemental EIS: September 20, 2022
- Notice of Availability of Draft Supplemental EIS: October 20, 2023
- Notice of Availability of Final Supplemental EIS: April 26, 2024

Public Notice periods:

- Public scoping: February 28, 2017, to January 31, 2018
- Public comment on Draft EIS: August 30, 2019, to October 29, 2019
- Public scoping period on Supplemental EIS: September 20, 2022, to November 4, 2022
- Public comment on Draft Supplemental EIS: October 20, 2023, to December 22, 2023

5.2 Public Involvement for the Initial EIS

The BLM published a Notice of Intent to prepare an EIS for the Ambler Road Project in the *Federal Register* (82 FR 12119) on February 28, 2017. A scoping period was initially announced for February 28, 2017, through May 30, 2017, and then extended to January 31, 2018, resulting in a total scoping period of 338 days. On August 30, 2019, a Notice of Availability of the Draft EIS was published in the *Federal Register* (84 FR 45799) announcing a 45-day public comment period, which ended on October 15, 2019. Public meetings for the Draft EIS were held in September and October 2019. On March 27, 2020, a Notice of Availability of the Final EIS was published in the *Federal Register* (85 FR 17353), and a Notice of Availability of the Record of Decision was published on July 28, 2020 (85 FR 45440). Documents associated with the EIS were posted on the BLM National NEPA Register ePlanning website (https://eplanning.blm.gov/eplanning-ui/project/57323/510).

5.3 Public Involvement for the Supplemental EIS

The BLM published a Notice of Intent to prepare a Supplemental EIS for the Ambler Road Project in the *Federal Register* (87 FR 57509) on September 20, 2022, which also announced a 45-day scoping period that closed on November 4, 2022. Comments received from the public during scoping identified resources that could be affected by the Project; provided input regarding the scope and thoroughness of the existing analysis, range of alternatives, and the identification of additional analysis needed; and made suggestions regarding data and information that had become available since the previous analysis had been published.

The comments and issues raised during scoping informed the updated impact analysis in the Supplemental EIS.

On October 23, 2023, the Notice of Availability of the Draft Supplemental EIS was published in the *Federal Register* (88 FR 72532) announcing the public comment period that ended on December 22, 2023. The BLM held 12 in-person Draft Supplemental EIS public meetings and ANILCA 810 hearings in November and December 2023. Details concerning dates, times, and locations of the meetings were announced through local news media, newspapers, and the BLM ePlanning website. Verbal comments given at public meetings and hearings were documented in formal transcripts for each individual meeting. Comments on the Draft Supplemental EIS were received via mail or hand delivery to the BLM Fairbanks District Office, through submission to the ePlanning website, and at public meetings. The presentation used during the meetings, transcripts of each meeting, and public and agency input received during the public process are available on the BLM Ambler Road ePlanning website: https://eplanning.blm.gov/eplanning-ui/project/57323/570.

- November 2, 2023 Fairbanks
- November 7, 2023 Evansville
- November 8, 2023 Kiana
- November 9, 2023 Kotzebue
- November 15, 2023 Allakaket
- November 17, 2023 Shungnak

- November 20, 2023 Kobuk
- December 6, 2023 Ambler
- December 11, 2023 Selawik
- December 13, 2023 Anchorage
- December 14, 2023 Alatna
- December 19, 2023 Huslia

On April 26, 2024, the BLM published a Notice of Availability of the Final Supplemental EIS in the *Federal Register* (89 FR 32458), initiating a 30-day pre-ROD waiting period that ended on May 26, 2024.

5.4 Evaluation and Consideration of Comments Received

Numerous comments were received from local, state, and Federal agencies, Tribes, and the public on the Draft Supplemental EIS during the comment period which ran from October 20, 2023, to December 22, 2023. All comments received on the Draft Supplemental EIS were reviewed, and substantive comments are summarized, and responses provided, in Appendix S: Response to Comments in Volume 3 of the Final Supplemental EIS.

During the 12 public meetings/ANILCA 810 hearings,189 people provided oral comments. The BLM received a total of 34,783 submissions during the public comment period. Of the submissions, 2,087 were unique letters, 30,065 were form copy letters, 1,423 were form plus letters, and 1,208 were duplicate letters. Of the unique letters, 11 were petition-style, whereby multiple individuals signed on to support the content of the letter. As a result, a total of 89,898 individuals submitted written comment during the comment period. In all, 96 submissions came from commenters who indicated they were representing an organization, business, Tribal Nation or Tribal entity, or government agency. All other submissions came from unaffiliated individuals.

Just over half of all comments (52%) fell into the following top seven categories: mitigation/monitoring, subsistence, mammals, fish and aquatics, alternatives, socioeconomics and communities, and water resources.

After the Final Supplemental EIS was published on April 19, 2024 (Notice of Availability for the Final Supplemental EIS published in the Federal Register on April 26, 2024), the BLM received and considered comments and additional information submitted to the BLM by the public and various stakeholders. The few comments received were generally similar to and consistent with the comments received during the development of the Supplemental EIS have been included in the decision file and considered by the BLM prior to executing this ROD. The BLM reviewed all comment submissions received after the release of the Final Supplemental EIS to determine if the information presented significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts, consistent with 40 CFR 1502.9(d). As a result of that review, the BLM finds that existing analysis in the Final Supplemental EIS remains adequate and does not require supplementation.

5.5 Engagement with Environmental Justice Communities

BLM Instruction Memorandum 2022-059, *Environmental Justice Implementation*, directs the BLM to "proactively provide opportunities for meaningful involvement of minority populations, low-income populations, and Tribes in BLM decision making processes that affect their lives, livelihoods, and health. This commitment is in addition to the BLM's responsibilities to consult with federally recognized Tribes and Alaska Native Corporations, as outlined in Department and BLM policies."

During development of the Supplemental EIS, the BLM engaged with multiple Alaska Native entities to seek input on the Project and how it may impact environmental justice populations. These consultations provided community members the opportunity to engage with the BLM to provide their comments on the Project and offer suggestions on how Project impacts may be avoided or minimized, or potential mitigation measures that may reduce Project impacts for Alaska Native stakeholders. The Final Supplemental EIS, Appendix I, provides an overview of the BLM's consultation efforts with Alaska Native entities during development of the Supplemental EIS and as part of the associated NHPA Section 106 process.

Additionally, as part of the public review process for the Draft Supplemental EIS, the BLM conducted a series of talking circle workshops in local communities associated with the public meetings. The talking

circles were held the morning after the Supplemental EIS public meetings and ANILCA Section 810 hearings in the communities and offered a loosely structured environment where community individuals were free to discuss and voice their questions, concerns, and comments regarding the Supplemental EIS and proposed Ambler Road Project. Participants were also encouraged to provide any traditional knowledge regarding Supplemental EIS topics, and any input towards potential requirements and conditions (i.e., mitigation) that could address identified impacts should the Ambler Road Project proceed to construction.

Information presented during public meetings and public comments, consultations, cooperating agency meetings, government to government consultations, talking circles, and other stakeholder meetings was used to develop the Supplemental EIS and identify potential impacts to environmental justice populations. The input from Tribes and communities potentially affected by the Project was incorporated into the resource analyses for subsistence and sociocultural systems, terrestrial mammals, public health, economics, and environmental justice. While some commenters suggested mitigation measures that could reduce the impacts of the Project, many others expressed the belief that there was no way to adequately mitigate potential environmental justice impacts related to subsistence use, human health, and the loss of cultural heritage and social cohesion (see Ambler Road Final Supplemental EIS Appendix Q, Talking Circle Summary Report).

6.0 FINAL AGENCY ACTION

6.1 Bureau of Land Management Recommendation

I recommend approval of this ROD to select the No Action Alternative and terminate the previously issued ROW Grant, as described herein.

Steven M. Cohn State Director

Bureau of Land Management, Alaska

June 20, 2024

Date

6.2 Departmental Approval

I hereby approve this ROD to select the No Action Alternative and terminate the previously issued ROW Grant across BLM-managed lands, as described herein.

My approval constitutes the final decision of the DOI and, in accordance with the regulations at 43 CFR 4.410(a)(3), is not subject to appeal under departmental regulations at 43 CFR 4.

Laura Daniel-Davis

Acting Deputy Secretary of the Interior

ro Janel-Pacs

JUNE 26 2024

Date

7.0 REFERENCES

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